

IN THE CLAIMS

1. (currently amended) A fluid ejection device capable of ejecting fluid onto media comprising:

a carrier having an upper surface that defines a recess including first and second inner surfaces that are substantially parallel to the upper surface and that are located at different distances below the upper surface, wherein the first and second inner surfaces face in the same direction as the upper surface;

a fluid ejecting substrate disposed in the recess and is configured for establishing electrical and fluidic coupling with the carrier, the fluid ejecting substrate having a generally planar orifice layer and a generally planar contact surface positioned below the orifice layer, the orifice layer extending above the upper surface of the carrier and defining a plurality of orifices therein; and

an encapsulant that at least partially encapsulates the fluid ejecting substrate and the carrier.

2. (original) The device of claim 1, wherein the fluid ejecting substrate is configured for receiving fluid from the carrier.

3. (original) The device of claim 1, wherein the encapsulant is formed adjacent the orifice layer.

4. (original) The device of claim 1, wherein the carrier comprises an electrical connector, the electrical connector being electrically coupled to the fluid ejecting substrate at a location below the upper surface of the carrier.

5. (previously presented) The device of claim 1, wherein the carrier comprises a channel that opens into the recess and is fluidically coupled to a fluid reservoir.

6. (original) The device of claim 1, wherein the encapsulant is molded onto the carrier and fluid ejecting substrate via injection.
7. (original) The device of claim 1, wherein the contact surface is electrically coupled to the carrier via an electrical interconnect, the electrical interconnect is positioned below the orifice layer of the fluid ejecting substrate.
8. (canceled)
9. (previously presented) The device of claim 1, wherein a portion of the recess comprises electrical connectors formed therein.
10. (canceled)
11. (currently amended) A printing system comprising:
a fluid reservoir; and
a printhead fluidically coupled to the fluid reservoir, wherein the printhead comprises:
a carrier having an upper surface that defines a recess including first and second inner surfaces that are substantially parallel to the upper surface and that are located at different distances below the upper surface, wherein the first and second inner surfaces face in the same direction as the upper surface;
a fluid ejecting substrate disposed in the recess and fluidically coupled to the carrier, the fluid ejecting substrate having a generally planar orifice layer and a generally planar contact surface positioned below the orifice layer, the orifice layer extending above the upper surface of the carrier and defining a plurality of orifices therein,

the contact surface electrically coupled to the carrier via an electrical interconnect that is positioned below the orifice layer of the fluid ejecting substrate; and

an encapsulant that encapsulates the electrical interconnect and at least partially encapsulates the fluid ejecting substrate.

12. (original) The printing system of claim 11, wherein the printhead is fluidically coupled to the fluid reservoir by a flexible conduit.
13. (original) The printing system of claim 11, wherein the carrier further comprises at least one electrical contact pad for electrically coupling the printhead to a printhead positioning member for positioning the printhead relative to print media.
14. (original) The printing system of claim 11, wherein the electrical interconnect is arched.
15. (original) An inkjet printhead responsive to activation signals for ejecting ink onto media comprising:
 - a carrier having an upper surface that defines a recess, wherein the recess formed in the upper surface of the carrier is countersunk thereby forming a countersunk recess, wherein a portion of the countersunk recess comprises electrical connectors formed therein;
 - a fluid ejecting substrate disposed therein that is configured for establishing electrical and fluidic coupling with the carrier, the fluid ejecting substrate having a generally planar orifice layer and a generally planar contact surface positioned below the orifice layer, the orifice layer extending above the upper surface of the carrier and defining a plurality of orifices therein; and

an encapsulant that at least partially encapsulates the fluid ejecting substrate and the carrier;

wherein the carrier further comprises an inner lower surface configured to support the fluid ejecting substrate; and

wherein the portion of the countersunk recess comprising the electrical connectors is positioned below the upper surface of the carrier and has a predetermined depth chosen to substantially equal the height of the contact surface of the fluid ejecting substrate.

16. (original) The print head of claim 15, wherein the contact surface of the fluid ejecting substrate comprises electrical contacts for receiving activation signals from a printing system via the carrier, the contact surface has a predetermined height chosen to substantially equal the predetermined depth of the portion of the countersunk recess comprising the electrical connectors.

17. (original) The print head of claim 15, wherein the fluid ejecting substrate further comprises a bevel, the bevel having a height that is chosen such that the orifice layer extends above the upper surface of the carrier.

18-20. (canceled)

21. (currently amended) A device capable of ejecting fluid onto media comprising:

a carrier including a first surface including a recess therein, the recess including first and second inner surfaces that are substantially parallel to and at different distances from the first surface, wherein the first and second inner surfaces face in the same direction as the first surface;

a substrate disposed in the recess and configured for establishing electrical and fluidic coupling with the carrier, the substrate including a generally planar

orifice layer and a plurality of contacts positioned below the orifice layer;
and

an encapsulant that at least partially encapsulates the substrate and the carrier.

22. (previously presented) The device of claim 21, wherein the substrate is configured for receiving fluid from the carrier.

23. (currently amended) ~~The device of claim 21,~~ A device capable of ejecting fluid onto media comprising:

a carrier including a first surface including a recess therein, the recess including first and second inner surfaces that are substantially parallel to and at different distances from the first surface;

a substrate disposed in the recess and configured for establishing electrical and fluidic coupling with the carrier, the substrate including a generally planar orifice layer and a plurality of contacts positioned below the orifice layer;
and

an encapsulant that at least partially encapsulates the substrate and the carrier;

wherein the second inner surface is above the first inner surface and comprises an electrical connector that is electrically coupled to the plurality of contacts.

24. (previously presented) The device of claim 21, wherein the carrier comprises a channel that is fluidically coupled to a fluid reservoir and to a fluid channel formed in the substrate.

25. (currently amended) ~~The device of claim 21,~~ A device capable of ejecting fluid onto media comprising:

a carrier including a first surface including a recess therein, the recess including first and second inner surfaces that are substantially parallel to and at different distances from the first surface;

a substrate disposed in the recess and configured for establishing electrical and fluidic coupling with the carrier, the substrate including a generally planar orifice layer and a plurality of contacts positioned below the orifice layer;
and

an encapsulant that at least partially encapsulates the substrate and the carrier;

wherein the plurality of contacts are arranged substantially linearly and are electrically coupled to the carrier via an electrical interconnect, the electrical interconnect formed within the carrier to be below the orifice layer of substrate.

26. (currently amended) ~~The device of claim 21,~~ A device capable of ejecting fluid onto media comprising:

a carrier including a first surface including a recess therein, the recess including first and second inner surfaces that are substantially parallel to and at different distances from the first surface;

a substrate disposed in the recess and configured for establishing electrical and fluidic coupling with the carrier, the substrate including a generally planar orifice layer and a plurality of contacts positioned below the orifice layer;
and

an encapsulant that at least partially encapsulates the substrate and the carrier;

wherein one of the first and second inner surfaces comprises electrical connectors integrally formed therein.